



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,029	04/09/2007	Suriyaprakash Janarthanam	81132731	9373
91663	7590	09/24/2010		
Jerome R. Drouillard 10213 Tims Lake Blvd. Grass Lake, MI 49240			EXAMINER HOANG, JOHNNY H	
			ART UNIT 3747	PAPER NUMBER
			NOTIFICATION DATE 09/24/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jdrouillard@fordsonlaw.com

lisa@i3law.com

Office Action Summary

Application No.

10/566,029

Applicant(s)

JANARTHANAM ET AL.

Examiner

JOHNNY H. HOANG

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-30 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 26 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/GS/US)
4) ☐ Interview Summary (PTO-413)
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____
Paper No(s)/Mail Date _____

DETAILED ACTION

Inventorship

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, line 7 recites the limitation "the flow of gaseous fuel"; line 8 recites the limitation "the presence of gaseous fuel" and "the confines"; and line 10 recites the limitation "the event". There is insufficient antecedent basis for this limitation in the claim. The applicant is required to correct these limitations.

Art Unit: 3747

Claim 1, line 14 recites the limitation "a gas detection signal" is double recitation. The applicant is required to correct this limitation.

Claims 4, 5 and 14 recite the limitation "a gas detection signal" is double recitation. The applicant is required to correct this limitation.

Claims 9 and 18 recite the limitation "said traction battery". There is insufficient antecedent basis for this limitation in the claim. The applicant is required to correct this limitation.

Claims 19-20 recite the limitation "said enclosure". There is insufficient antecedent basis for this limitation in the claim. The applicant is required to correct this limitation.

Claims 21, 22 and 24 are rejected the same reason as claim 1.

Claims 23-24 recites the limitation "operation of vehicle with traction motor/generator" is unclear, there is indefinite for this limitation in the claim. The applicant is required to correct and explain more details for this limitation.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 7-13 and 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Bogartz (US 5,501,200).

Re claim 1, the reference of Bogartz discloses a compressed gas fueling system including the following subject matters: a gaseous fuel storage tank (7), a fuel line (11), check valve (45), solenoid actuated valve (49), gas detection sensor (39), engine (3) and fuel management controller for closing the valve in the event that said gas sensor emits a gas detection signal [Figs. 1-3 and col. 5, lines 3-39].

Re claim 2, as discussed in claim 1, the reference of Bogartz further teaches engine (3) is an internal combustion engine.

Re claim 3, the reference of Bogartz further teaches the engine (3) includes a fuel cell.

Re claim 4, the pressure indicator (51) having the function as atmospheric circulator.

Re claim 7, see above discussions.

Re claim 8, the reference of Bogartz further teaches the electric motor (8) and the internal combustion engine having the transmission is well-known in the art.

Re claim 9, see specification of prior art.

Re claim 10, see rejection of claim 8.

Re claims 11-13, the reference of Bogartz further teaches the compressed gas which is well-known including hydrogen, natural gas, and liquefied petroleum gas.

Re claims 19-20, see Figure 1.

Re claims 21-23, see rejection of claim 1.

Re claims 24-30, see the above rejection and specification for more details.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3747

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-6 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bogartz.

Re claims 5-6, the reference of Bogartz disclosed the claimed invention as above rejection except for the controller not only managing the fueling system, but also controls the at least one window in passenger cabin or moon roof. The controller for controlling the vehicle system is well-known in the art which includes the power window, moon roof.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the controller for controlling the power window or the moon roof of the vehicle, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges or values involves only routine skill in the art. *In re Aller*, 105 USPQ 233 (CCPA 1955).

Re claims 14-18, the reference of Bogartz disclosed the claimed invention as above rejection except for the location of the gas detection sensor and the warning system. The reference of Bogartz shows the location of gas detection sensor (39) in the fuel management system of vehicle.

The location of gas detection sensors could be located any where in the engine or inside the vehicle and it also includes the warning system is so notoriously well known in the art, so as to be proper for official notice.

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have located the gas detection sensor at storage tank or engine or passenger cabin..., as is well known in the art.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHNNY H. HOANG whose telephone number is (571) 272-4843. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on (571) 272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JHH/
September 20, 2010

/Johnny H. Hoang/
Examiner, Art Unit 3747

/ Willis R. Wolfe, Jr. /
Primary Examiner
Art Unit 3747